## REMARKS

Claims 1-8, 10-13, 16, 17, 20 and 22 are pending, with claims 9, 14, 15, 18, 19 and 21 having previously been canceled without prejudice or disclaimer. By this Amendment, claims 1, 16 and 22 have been amended to clarify the claimed subject matter. Claims 1-8, 10-13, 16, 17, 20 and 22 remain pending upon entry of this Amendment, with claims 1, 16 and 22 being in independent form.

The title was objected to as purportedly not sufficiently descriptive.

By this Amendment, the application has been amended to address the formal matters referenced in the Office Action, as well as otherwise.

Withdrawal of the objection to the title is respectfully requested.

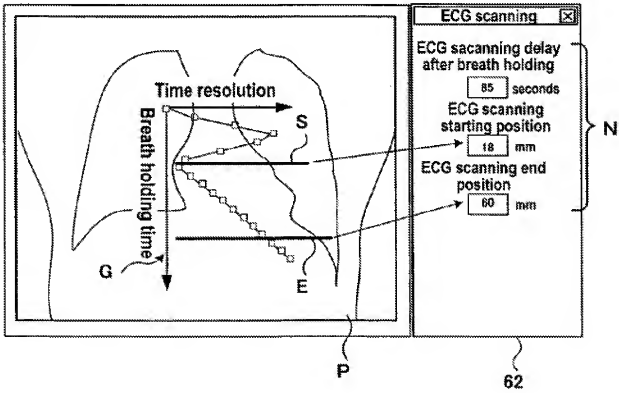
Claims 1-3, 11-13, 16 and 20 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Yavuz et al. (US 6,539,074) in view of Pan (WO 02/26135). Claims 4, 5, 10 and 17 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Yavuz in view of Pan and further in view of Heartview ("Heartview CT Application Guide", printed in Germany 09/04). Claim 22 was rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Pan in view of Watanabe (JP 2001-212137)

Applicant respectfully submits that each of independent claims 1 and 16 of the present application is allowable over the cited art, for at least the reason that the cited art does not disclose or suggest the aspects of ***obtaining a time range so that the time resolution is within the desired range on an image data collection condition based on the periodic motion data*** and a relationship among a time resolution of an image obtained, image data collection conditions and periodic motion, and setting on a body axis of the object a starting position of image data collection and an end position of image data collection ***such that the time range matches the***

***image data collection range between the set start position and the set end position***, and collecting the image data collection from the image data collection starting position to the end position.

Such aspects are discussed in paragraphs [0110]-[0115] (of US 2008/0056547 A1) of the present application, with reference to the example illustrated in Fig. 6 (reproduced below).

FIG. 6




In the example illustrated in Fig. 6, projected image P of the object and time resolution graph G are superimposed on the screen of the display 62. In the time resolution graph G, fluctuations in estimated time resolution with breath holding time are indicated on a coordinate system specified by the time axis and the temporal resolution axis. A start marker S indicates a

planned start time of image data collection on the time resolution graph G and indicates a planned starting position of image data collection on the projected image P. That is, image data collection is started at a time corresponding to the coordinates of the start marker S on the time axis of the time resolution graph G, and image data on a part of the object 1 is scheduled to be collected at that time, the part corresponding to the position of the start marker S on the projected image P. Similarly an end marker E indicates a planned end time of image data collection on the time resolution graph G and indicates a planned end position of image data collection on the image data collection position of the projected image P. With these markers, the relationship between a part where image data is collected on the object 1 and the breath holding time can be indicated. In this way, on the screen of the display 62, the positions of the projected image P and the origin of the time axis of the time resolution graph G and the direction and scale of the time axis are relatively adjusted, and the time resolution graph G and the position of image data collection on the projected image P are associated with each other, so that an estimated time resolution of an image obtained on a part of the object 1 can be clearly displayed.

The operator operates the operation part 64 to drag the start marker S and the end marker E which are displayed on the screen of the display 62. Thus the operator can move the start marker S and the end marker E relative to the projected image P and the time resolution graph G. The numerical display N is changed according to the movement. Further, an image data collection range may be designated by inputting the positions of the start marker S and the end marker E on the projected image P or inputting numeric values on "starting position" and "end position" of the numerical display N.

Yavuz, as understood by applicant and as already discussed at length in the record, proposes a computed tomography (CT) system for reconstruction of multiple, tomographic slice

images to represent an imaged object in three spatial dimensions, after performing a basic data collection operation for obtaining three-dimensional projection data, performing an operation to analyze the three-dimensional projection data to determine a particular set of projection views at a selected view angle for each data acquisition cycle, performing an operation to provide a reconciliation between the axial positions at which the projection views of a given set represent the object and the axial positions at which the stacked slice images are to represent the object.

Yavuz proposes applying such approach in cardiac CT imaging wherein the plural projection views can represent the heart at all the different phases throughout the cardiac cycle.

However, such approach in Yavuz does NOT involve the aforementioned aspects of **obtaining a time range** so that the time resolution is within the desired range on an image data collection condition based on the periodic motion data, and setting on a body axis of the object a starting position of image data collection and an end position of image data collection **such that the time range matches the image data collection range between the set start position and the set end position**.

Stated another way, in the aforementioned aspects , the data collection range is set on a body axis of the object, and the time range is made to correspond to the set data collection range.

On the other hand, in Yavuz, the time range is driven by the cardiac cycle not by an **image data collection range between a start position and a end position**, each set on a body axis.

Likewise, the time range in Pan is correlated to cardiac cycle, as is the conventional approach.

The cited references (including Heartview and Watanabe) simply do not disclose or suggest the aspects of independent claims 1 and 16 of the present application of ***obtaining a time***

***range so that the time resolution is within the desired range on an image data collection condition based on the periodic motion data*** and a relationship among a time resolution of an image obtained, image data collection conditions and periodic motion, and setting on a body axis of the object a starting position of image data collection and an end position of image data collection ***such that the time range matches the image data collection range between the set start position and the set end position***, and collecting the image data collection from the image data collection starting position to the end position.

Applicant submits that the cited art, even when considered along with common sense and common knowledge to one skilled in the art, does ***NOT*** render unpatentable the aforementioned aspects, and that therefore independent claims 1 and 16, and the claims depending therefrom, are allowable over the cited art.

The Office Action indicated that claims 6-8 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, since independent claim 1 is submitted to be allowable over the cited art, no changes to the form of claims 6-8 are believed to be necessary.

Regarding claim 22, neither Pan nor Watanabe (nor any of the other cited references) disclose or suggest the aspects that time information in the graph is associated with position of the image data collection on the projected image of the object.

In view of the remarks hereinabove, applicant submits that the application is now allowable, and earnestly solicits the allowance of the application.

However, if the Examiner can suggest an amendment that would advance this application to condition for allowance, the Examiner is respectfully requested to call the undersigned

attorney.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any required fees in connection with this amendment, and to credit any overpayment, to our Deposit Account No. 03-3125.

Respectfully submitted,

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